

Amendments to the Claims:

1-19. (Canceled).

20. (Currently amended) A ~~nucleic acid~~ DNA molecule for removing a nucleic acid sequence that has been inserted into a host cell, the DNA molecule ~~comprising in sequential order (a) a comprising, flanked by recombina~~ site, (b) sites, (a) a spatially or temporally restricted promoter operably linked to (c) (b) a recombina gene, (d) and (c) said nucleic acid sequence and (e) a recombina site to be removed.

21. (Previously presented) The molecule of claim 20, wherein said recombina site is selected from the group consisting of loxP and FRT.

22. (Previously presented) The molecule of claim 20, wherein said recombina gene is selected from the group consisting of Cre and FLP.

23. (Previously presented) The molecule of claim 21, wherein said recombina gene is selected from the group consisting of Cre and FLP.

24. (Previously presented) The molecule of claim 20, wherein said molecule further comprises a gene which is desired to be expressed in a cell.

25-31. (Canceled).

32. (Previously presented) The nucleic acid molecule of claim 20, wherein said nucleic acid sequence is a wild-type allele or fragment thereof of a gene.

33-42. (Canceled).

43. (Currently amended) A method for deleting a nucleic acid sequence from a mouse cell genome in a regulatable manner utilizing a promoter, wherein said nucleic acid sequence is part of a DNA molecule comprising ~~in sequential order a~~, flanked by recombinase site sites, a spatially or temporally restricted promoter operably linked to a recombinase gene, ~~and~~ said nucleic acid sequence ~~and a recombinase site to be removed~~, the method comprising growing said mouse cell such that ~~the~~ said promoter is active, said recombinase gene is expressed in the cell and said nucleic acid sequence is deleted.

44. (Previously presented) The method of claim 43, wherein the DNA molecule further comprises a gene which is desired to be expressed in the cell.

45. (Previously presented) The method of claim 44, wherein said nucleic acid sequence is heterologous DNA.

46. (Previously presented) The method of claim 44, wherein the promoter is specific to the male or female gamete.

47. (Previously presented) The method of claim 43, wherein the mouse cell is transgenic for said DNA molecule and said nucleic acid sequence is deleted during gametogenesis in the mouse.

48. (Previously presented) The method of claim 47, wherein said nucleic acid sequence is heterologous DNA.

49. (Currently amended) A transgenic mouse comprising a ~~nucleic acid~~ DNA molecule ~~comprising in sequential order (a) a comprising, flanked by recombinase site, (b) sites, (a) a~~ spatially or temporarally restricted promoter operably linked to ~~(c) (b) a recombinase gene, (d) and (c) a nucleic acid sequence and (e) a recombinase site to be removed,~~ wherein said ~~nucleic acid~~ DNA molecule has been stably integrated into the genome of said transgenic mouse.

50. (Previously presented) The method of claim 43, wherein said nucleic acid sequence is heterologous DNA.

51. (Previously presented) The method of claim 43, wherein said nucleic acid sequence is a wild-type allele or fragment thereof of a gene.

52. (Previously presented) The method of claim 44, wherein said nucleic acid sequence is a wild-type allele or fragment thereof of a gene.

53. (Previously presented) The method of claim 43 wherein the cell is part of a tissue and the promoter is a promoter specifically expressed in said tissue.

54. (Previously presented) The method of claim 53 wherein the nucleic acid molecule further comprises a gene which is desired to be expressed in the tissue.

55. (Previously presented) The method of claim 53, wherein said nucleic acid sequence is a wild-type allele or fragment thereof of a gene.

56. (Previously presented) The method of claim 53, wherein said nucleic acid sequence is heterologous DNA.

57. (Previously presented) The method of claim 53 wherein said tissue is male or female gametic tissue.